## **ABSTRACT**

The invention relates to a method for producing expanded polyurethane moulded bodies. According to said method, an expandable polyurethane reactive blend is poured into a mould and the latter is evacuated; the reactive blend expands to fill the mould after being introduced into the latter and gases that are released during the expansion process are extracted through expansion openings that are located at one or more points of maximum height in the upper half of the mould; once the blend has set, the mould is aerated and the moulded body is ejected. The aim of the invention is to simplify the method and obtain faster cycle times. To achieve this, the expansion openings are configured by needle valves, which are controlled in such a way that they close immediately upon the entry of the foam front into the valve capillary. The invention also relates to a device for carrying out said method.